

XiaoFeng Wang

Curriculum Vitae

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EDUCATION

2004	Carnegie Mellon University Ph.D. Electrical and Computer Engineering	Pittsburgh, USA
1996	Shanghai Jiao Tong University M.S. Computer Science	Shanghai, PRC
1993	Nanjing University of Aeronautics and Astronautics B.S. Computer Science	Nanjing, PRC

PROFESSIONAL EXPERIENCE

11/2017 —	Director, Center for System Security and Data Privacy
1/2010 —	Co-Director, Center for Security Informatics
1/2010 — 12/2010	Program Director, Security Informatics
11/2017—	Rudy Professor of Computer Science, Engineering and Informatics
7/2015 —	Professor
7/2010 — 6/2015	Associate Professor
8/2004 — 6/2010	Assistant Professor School of Informatics, Computing and Engineering Indiana University at Bloomington
1/1997 — 8/1997	IT Specialist Hewlett-Packard Computer Products (Shanghai) Co.Ltd
3/1996 — 1/1997	Software Engineer Shanghai Venus Software co., LTD

PROFESSIONAL SERVICE

- Program Co-Chair, the 25th ACM Conference on Computer and Communications Security (CCS'18)
- Vice Chair, ACM Special Interest Group on Security, Audit and Control (SIGSAC)
- Founding organizer (with my colleagues at IU and UCSD): iDASH Genome Privacy Challenges (www.humangenomeprivacy.org)
- Program committee member, the USENIX Security Symposium (Security' 17)
- Program Co-Chair, the 11th ACM Asia Conference on Computer and Communications Security (ACM AsiaCCS'16)
- Program Chair, the 11th International Conference on Security and Privacy in Communication Networks (SecureComm'15)
- Workshop Co-Chair, the 22nd ACM Conference on Computer and Communication Security (CCS'15)
- General Chair, the 13th Privacy Enhancing Technologies Symposium (PETS'13)
- Associate Editor, IEEE Transactions on Dependable and Secure Computing (TDSC), since December, 2014
- Invited panelist, Security and Privacy Challenges in Health Informatics, the NSF SaTC PI meeting 2015.
- Program committee member, the 17th International Symposium on Research in Attacks, Intrusions and Defenses (RAID'15)
- Program committee member, the Annual Network and Distributed System Security Symposium (NDSS' 13, 14, 15, 16, 17)
- Program committee member, the IEEE Symposium on Security and Privacy (S&P'10, 11, 12, 13, 14)
- Program committee member, the International World Wide Web Conference, Security and Privacy Track (WWW'09, 12, 14, 15)
- Member, PET Board.
- Program committee member, the ACM Symposium on Information, Computer and Communications Security (ASIACCS'12)
- Member, PET Award 2012 committee
- Program committee member, the International Conference on Distributed Computing Systems (ICDCS'10, 11)
- Chair, Local arrangement committee, CCS'11
Member, Patron and Industry Outreach, CCS'10
Chair, Regional arrangement committee, CCS'09

- Program committee member, the Workshop on Security and Privacy in Medical and Home-Care Systems 2009
- Program committee member, the International Conference on Security and Privacy in Communication Networks (SecureComm'08, 09)
- Program committee member and Session Chair, the ACM Conference on Computer and Communication Security (CCS'08, 10, 15, 16)
- Co-Chair, the I3P Workshop on Insider Threats in the Networked World (2008)
- Local arrangement, the Fifth Midwest Security Workshop (Spring, 2008), Program chair, the Second MSW (Fall, 2006) and program committee members, MSW (2006 – 2008)
- Program committee member, the Fourth International Conference on Information Systems Security (ICISS 2008)
- Program committee member, the Third International Conference on Internet Monitoring and Protection (ICIMP'08)
- Steering committee member, NSF Biomedical Informatics Workshop (2007)
- Program committee member, the Workshop on Privacy in the Electronic Society (WPES'06-08, 12)
- Program committee member, the IEEE International Symposium on Dependable Autonomic and Secure Computing (DASC'06 and '07)
- Program committee member, the 8th International Conference on Information and Communications Security (ICICS '06)
- Program committee member, the 5th International Conference on Cryptology and Network Security (CANS '06)
- Program committee member, the International Workshop on Incentive Based Computing (IBC'05 and '06)
- Program committee member, the 4th International Conference on Applied Cryptography and Network Security (ACNS'06)
- Program committee member, the 16th Annual International Symposium on Algorithms and Computation (ISAAC'05)
- Program committee member, ACM Workshop on Wireless Security 2005 (WiSe'05).
- Program committee member, the International Joint Conference on Autonomous Agents and Multi Agents Systems (AAMAS'04 and 05).
- Panelist: Attacks on and Security Measures for Ad Hoc Wireless Networks, American Association for the Advancement of Science annual Conference 2005.
- Program committee member of IEEE/ACM First International Workshop on Broadband Wireless Services and Applications (BroadWISE 2004)

- Paper reviewer for the IEEE/ACM Transactions on Networking, the ACM Transactions on Information and System Security, the IEEE Transactions on Dependable and Secure Computing, the IEEE Transactions on Parallel and Distributed Systems, International Journal of Knowledge and Information Systems, the IEEE transactions on Knowledge and Data Engineering, Electronic Commerce Research Journal, ACM Conference on Computer and Communication Security, RSA CT, IEEE INFOCOM, IEEE GLOBECOM, ACM International Conference on Information Security, Workshop on Privacy Enhancing Technologies, International Conference on Security and Cryptography for Networks, The IEEE International Conference on Communications, Pacific Rim International Workshop on Multiagent Systems, Pacific Rim International Conference on Artificial Intelligence and IFIP World Computer Congress.
- Senior member of IEEE and member of ACM

TEACHING EXPERIENCE

Fall 2005-	I430/520 and B649 "Security for Networked Systems" (An upper-level undergraduate and graduate course) Indiana University at Bloomington
Spring 2007-	I521 "Malware: Threat and Defense" (A graduate course) Indiana University at Bloomington
Spring 2006- 2009	I231 "Mathematic Foundations for Cybersecurity" (A second-year undergraduate course) Indiana University at Bloomington
Spring 2005	I400 "Introduction to Information Security" (A third and fourth year undergraduate course) Indiana University at Bloomington
Spring 2002	Teaching assistant for 18440 "Internet Security" (An upper-level undergraduate and graduate course) Carnegie Mellon University

INTERNAL SERVICE

1. Facility Committee, Informatics (Fall 2004 – Spring 2006)
2. Faculty Hiring Committee, Informatics (Fall 2004 – Spring 2005, Fall 2008 – Spring 2009, Fall 2011)
3. Admission and Awards Committee, Computer Science (Fall 2004 –)

4. Graduate Admissions and Financial Aid Committee, Informatics (Fall 2006 – Spring 2008, Fall 2014)
 5. Graduate Education Committee, Computer Science (Fall, 2010 – 2012, 2014 –)
 6. Security Contact for Health Informatics Program (Spring, 2011 –)
 7. Chair, Faculty Hiring Committee (security track) (Fall 2013 – Spring 2014)
 8. Chair, Admission and Awards Committee, Computer Science (Fall 2014 –)
 9. Program Director, Security Informatics Program (2010)
 10. Director, Center for Security Informatics (2010 –)
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IMPACTS OF MY RESEARCH

My research frequently receives the attention from the mainstream media, including CNN, MSNBC, PC World, Slashdotted, CNet News, etc. Here are the links to incomplete lists of media coverage.

Genome Privacy Competition:

<https://www.genomeweb.com/informatics/new-community-challenge-seeks-evaluate-methods-computing-encrypted-genomic-data>

<http://www.nature.com/news/extreme-cryptography-paves-way-to-personalized-medicine-1.17174>

MassVet: <http://sit.soic.indiana.edu/en/2015/09/06/massvet-usenix/>

XARA Threats to Mac OS X and iOS

<http://sit.soic.indiana.edu/en/2015/09/07/xara-ccs/>

Android Secure Upgrading:

<http://www.secureandroidupdate.org/>

Privacy in Dissemination of Human Genomic Data:

[News Release by Ontario's Information and Privacy Commissioner](#) and [BioSpace](#)

Security Analysis of Cashier-as-a-Service Systems:

<http://www.informatics.indiana.edu/xw7/impacts/CaaS.htm>

Sound Malware for Android Phones

<http://www.informatics.indiana.edu/xw7/impacts/Soundcomber.htm>

Facebook Authorization Flaw

<http://www.informatics.indiana.edu/xw7/impacts/Facebook.htm>

Side-Channel Information Leaks in Web Applications

<http://www.informatics.indiana.edu/xw7/impacts/SideChannel.htm>

Puzzle Auction

<http://www.informatics.indiana.edu/xw7/impacts/PuzzleAuction.htm>

HONORS

- 2017 James H. Rudy Professorship, Indiana University
- 2016 Best Paper Award in Applied Cyber Security Research, 3rd Place, CSAW'16 (NYU-Poly Cyber Security Awareness Week): for the work on cyber threat intelligence gathering
- 2014 Best Paper Award in Applied Cyber Security Research, 3rd Place, CSAW'14 (NYU-Poly Cyber Security Awareness Week): for the work on security risks in Android customization
- 2014 [Third place in National Security Innovation Competition](#): for the work on Android secure upgrading
- 2013 [Finalist](#) for the Best Applied Security Paper Award, CSAW'13 (NYU-Poly Cyber Security Awareness Week): for the work on dedicated hosts on malicious web infrastructures
- 2011 Award for Outstanding Research in Privacy Enhancing Technologies ([the PET Award](#)): for my research on Genome Privacy
- 2011 PET Award runner-up: for my research on side-channel information leaks in web applications
- 2011 Best Practical Paper Award, the 32nd IEEE Symposium on Security and Privacy: for my research on logic flaws in hybrid web applications
- 2006 Fast-track submission to the ACM Transactions on Information System Security as one of the best papers of the ACM Conference on Computer and Communications Security 2006: for my work on malware detection

SELECTED INVITED TALKS

- 2016 Keynote at the 10th Central Area networking and Security Workshop (CANSec'16).
- 2016 Invited seminar, Chinese University of Hong Kong
- 2016 Seminar talk, Northwestern University
- 2016 Seminar talk, University of Southern California
- 2015 Seminar, Northeastern University
- 2014 TRUST Security Seminar, University of California, Berkeley
- 2014 Invited talk. Narus Inc.

2014 Seminar talk. Purdue University
2013 Seminar talk. University of Maryland at College Park
2013 Seminar talk. University of Texas at Austin
2013 Invited talk. Chinese Academy of Sciences, China
2012 Invited talk. Microsoft Faculty Summit
2012 Invited talk. Computer Science Center, Shangdong Academy of Sciences, China
2012 Invited talk. Computer Science, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
2012 Seminar talk. Computer Science, University of Illinois at Urbana-Champaign
2011 Invited talk. IBM T. J. Watson Research Center
2011 Seminar talk. CyLab, Carnegie Mellon University
2011 Seminar talk. Computer Science Department, North Carolina State University
2010 CERIAS seminar talk, Purdue University.
2010 IPAM Workshop on Statistical and Learning- Theoretic Challenges in Data Privacy
2009 Invited talk. Microsoft Research Asia.
2009 CERIAS seminar, Purdue University.
2008 Seminar talk. Computer Science Department, North Carolina State University.
2008 Seminar talk. Computer Science Department, Indiana University and Purdue University at Indianapolis.
2005 Panel: Attacks on and Security Measures for Ad Hoc Wireless Networks, American Association for the Advancement of Science annual Conference.
2002 Invited talk. Workshop on Multi-Agent Learning: Theory and Practice.

CURRENT AND PAST GRANTS

Total: around \$8.6 million; my share: around \$4.73 million

- NIH U01 (1U01EB023685-01): “Encryption Methods and Software for Privacy-Preserving Analysis of Biomedical Data”
Role: MPI (one of the two PIs on the project)
Amount: \$1,395,515
Time: From 9/30/2016 to 6/30/2019
(Subcontract to UCSD: \$453,137)
- NSF-CNS-1618493: “TWC: Small: Safeguarding Mobile Cloud Services: New Challenges and Solutions”
Role: Sole PI
Amount: \$499,968

Time: From 9/01/2016 to 8/31/2019

- Army Research Office: “How to Compose Security Protection for Third-Party Applications”
Role: PI
Amount: \$550,000
Time: From 3/01/2016 to 2/28/2019
(Subcontract to Purdue: \$252,999)
- Gift Grant from Samsung Research
Role: Sole PI
Amount: \$50,000
- NSF-CNS-1527141: “TWC: Small: Understanding and Mitigating the Security Hazards of Mobile Fragmentation”
Role: Sole PI
Amount: \$498,897
Time: From 10/01/2015 to 9/30/2018
- NSF-CNS-1408874: “TWC: Medium: Collaborative: Broker Leads for Privacy-Preserving Discovery in Health Information Exchange”
Role: IU PI (the project is led by UIUC)
Amount: \$360,000 (total \$1.05 million)
Time: From 9/01/2014 to 8/31/2018
- NIH R01 (1R01HG007078-01): “Privacy Preserving Technologies for Human Genome Data Analysis and Dissemination”
Role: Contact PI (Project Leader)
Amount: \$900,000
Time: From 9/23/2013 to 6/30/2016
(Subcontract to UCSD: \$272,025)
- NSF-CNS-1223495: “TWC: Small: Secure Data-Intensive Computing on Hybrid Clouds”
Role: PI
Amount: \$500,000
Time: From 9/01/2012 to 8/31/2015
- NSF-CNS-1223477: “TWC: Small: Knowing Your Enemy: Understanding and Counteracting Web Malvertising”
Role: Sole PI
Amount: \$478,160
Time: From 9/01/2012 to 8/31/2015
- NSF-CNS-1117106: "TC: Small: Plugging Logic Loopholes in Hybrid Web Applications to Secure Web Commerce"

Role: Sole PI
Amount: \$499,987
Time: From 9/01/2011 to 8/31/2014

- NSF-CNS-1017782: “TC: Small: Reining in Side-Channel Information Leaks in the Software-as-a-Service Era”
Role: Sole PI
Amount: \$494,110
Time: From 9/01/2010 to 8/31/2014
- Gift Grant from Microsoft Research
Role: Sole PI
Amount: \$10,000
- NSF-CNS-0716292: “CT-ISG: Automatic Generation of Vaccine Exploits to Protect Commodity Software”
Role: Sole PI
Amount: \$320,000
REU Supplemental Award: \$19,200
Time: From 9/01/2007 to 8/31/2011
- AFRL SBIR Phase III, Net-Centric Sensor Grids, FA8650-09-D-1639: “Advanced Cloud Computing Technology for Sensor Grids”
Role: Co-PI
Amount: \$726,000
Time: From 7/1/2009 to 6/30/2010
- CACR Internal Grant (Gift from the Lilly Endowment Inc.) “Evaluation and Mitigation of Privacy Risks in Human Genome Research”
Role: PI
Amount: \$49,901.40
Time: From 7/01/2009 to 6/30/2010
- I3P/DHS: “Mitigating Insider Threat with Incentives” (IU part of the project "Human Behavior, Insider Threat and Awareness")
Role: PI
Amount: \$370,233.63
Time: From 4/01/2007 to 7/31/2009
- NSF-IIS-064621: "NSF Frontiers in Health Information Delivery Workshop"
Role: Co-PI
Amount: \$99,920
Time: From 10/01/2006 to 10/31/2007
- NSF-IIS-0549313: "A Test-bed for Personalized, Privacy-preserving and High Quality Health Information Delivery"

Role: Co-PI
Amount: \$100,000
Time: From 09/15/2005 to 08/31/2007

PRESENTATIONS AT INDUSTRY CONFERENCES

- 2016 “Discovering and Exploiting Novel Security Vulnerabilities in Apple Zeroconf”. Black Hat USA (Presented by L. Xing and X. Bai)
- 2016 “Dangerous Hare: Hanging Attribute References Hazards Due to Vendor Customization”. Black Hat USA (Presented by N. Zhang)
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PATENTS

1. X. Wang, H. Tang, Y. Chen and B. Peng, “Secure and Scalable Mapping of Human Sequencing Reads on Hybrid Clouds”. US9276911
 2. Y. Xie, F. Yu, Z. Li and X. Wang, “Determining Legitimate and Malicious Advertisements Using Advertising Delivery Sequences”. US20130339158 A1
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RESEARCH AREAS

Data-Centric Security, Mobile Security, Healthcare Security and Privacy (Human Genome Privacy in particular), Cloud and Web Security, Game-Theoretic Incentive Engineering and its Application to Information Security

PUBLICATIONS

I am considered to be among the top 10 authors on leading security venues in the past 17 years, according to the statistics: <http://s3.eurecom.fr/~balzarot/notes/top4/index.html>

1. J. Chen, W. Diao, Q. Zhao, C. Zuo, Z. Lin, X. Wang, W. Lau, M. Sun, R. Yang, K. Zhang, 2018 “IoTFuzzer: Discovering Memory Corruptions in IoT Through App-based Fuzzing”. To Appear in the 24th Annual Network and Distributed System Security Symposium (NDSS).
2. X. Zhang, X. Wang, X. Bai, Y. Zhang, X. Wang, 2018 “OS-level Side Channels without Procs: Exploring Cross-App Information Leakage on iOS”. To Appear in the 24th Annual Network and Distributed System Security Symposium (NDSS).
3. Y. Nan, Z. Yang, X. Wang, Y. Zhang, D. Zhu, M. Yang, 2018 “Finding Clues for Your Secrets: Semantics-Driven, Learning-Based Privacy Discovery in Mobile Apps”. To Appear in the 24th Annual Network and Distributed System Security Symposium (NDSS).
4. Y. Duan, M. Zhang, A. Bhaskar, H. Yin, X. Pan, T. Li, X. Wang, X. Wang, 2018 “Things You May Not Know About Android (Un)Packers: A Systematic Study based on Whole-

System Emulation”. To Appear in the 24th Annual Network and Distributed System Security Symposium (NDSS).

5. P. Wang, X. Mi, X. Liao, X. Wang, K. Yuan, F. Qian, R. Beyah, 2018 “Game of Missuggestions: Semantic Analysis of Search-Autocomplete Manipulations”. To Appear in the 24th Annual Network and Distributed System Security Symposium (NDSS).
6. Y. Chen, W. You, Y. Lee, K. Chen, X. Wang, W. Zou, 2017 “Mass Discovery of Android Traffic Imprints through Instantiated Partial Execution”. In Proceedings of the 24th ACM Conference on Computer and Communications Security (CCS).
7. T. Li, X. Wang, M. Zha, K. Chen, X. Wang, L. Xing, X. Bai, N. Zhang, X. Han, 2017 “Unleashing the Walking Dead: Understanding Cross-App Remote Infections on Mobile WebViews”. In Proceedings of the 24th ACM Conference on Computer and Communications Security (CCS).
8. W. You, P. Zong, K. Chen, X. Wang, X. Liao, P. Bian, B. Liang, 2017 “SemFuzz: Semantics-based Automatic Generation of Proof-of-Concept Exploits”. In Proceedings of the 24th ACM Conference on Computer and Communications Security (CCS).
9. W. Wang, G. Chen, X. Pan, Y. Zhang, X. Wang, V. Bindschaedler, H. Tang, C. Gunter, 2017 “Leaky Cauldron on the Dark Land: Understanding Memory Side-Channel Hazards in SGX”. In Proceedings of the 24th ACM Conference on Computer and Communications Security (CCS).
10. X. Mi, F. Qian, Y. Zhang, X. Wang, 2017 “An Empirical Characterization of IFTTT: Ecosystem, Usage and Performance”. In Proceedings of the 17th ACM Internet Measurement Conference (IMC).
11. X. Bai, Z. Zhou, X. Wang, Z. Li, X. Mi, N. Zhang, T. Li, S. Hu, K. Zhang, 2017 “Picking Up My Tab: Understanding and Mitigating Synchronized Token Lifting and Spending in Mobile Payment”. In Proceedings of the 26th USENIX Security Symposium (Security).
12. Y. Tian, N. Zhang, Y. Lin, X. Wang, B. Ur, X. Guo, P. Tague, 2017 “SmarthAuth: User-Centered Authorization for the Internet of Things”. In Proceedings of the 26th USENIX Security Symposium (Security).
13. S. Alrwais, X. Liao, X. Mi, P. Wang, X. Wang, F. Qian and R. Beyah, D. McCoy, 2017 “Under the Shadow of Sunshine: Understanding and Detecting BulletPoof Hosting on Legitimate Service Provider Networks”. In Proceedings of the 38th IEEE Symposium on Security and Privacy (IEEE S&P)
14. Y. Lee, T. Li, N. Zhang, S. Demetriou, M. Zha, X. Wang, K. Chen, X. Zhou, X. Han, M. Grace, 2017 “Ghost Installer in the Shadow: Security Analysis of App Installation on Android”. In Proceedings of the 47th IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2017)
15. X. Liu, T. Chen, F. Qian, Z. Guo, F. Lin, X. Wang, K. Chen, 2017 “Characterizing Smartwatch Usage in the Wild”. In Proceedings of the 15th ACM International Conference on Mobile Systems, Applications, and Services (ACM MobiSys)
16. X. Pan, X. Wang, Y. Duan, X. Wang, H. Ying, 2017 “Dark Hazard: Learning-based, Large-Scale Discovery of Hidden Sensitive Operations in Android Apps”. In Proceedings of the 23rd Annual Network and Distributed System Security Symposium (NDSS)

17. Y. Nan, Z. Yang, M. Yang, S. Zhou, Y. Zhang, G. Gu, X. Wang, L. Sun, 2017 "Identifying User-Input Privacy in Mobile Applications at a Large Scale". In the IEEE Transactions on Information Forensics & Security. (Extension of 33)
18. X. Mi, F. Qian and X. Wang, 2016 "SMig: Stream Migration Extension for HTTP/2". In Proceedings of the 12th International Conference on Emerging Networking Experiments and Technologies (CoNEXT).
19. S. Alrwais, K. Yuan, E. Alowaisheq, X. Liao, A. Oprea, X. Wang and Z. Li, 2016 "Catching Predators at Watering Holes: Finding and Understanding Strategically Compromised Websites". In Proceedings of the 32nd Annual Computer Security Applications Conference (ACSAC).
20. X. Liao, K. Yuan, X. Wang, Z. Li, L. Xing and R. Beyah, 2016 "Acing the IOC Game: Toward Automatic Discovery and Analysis of Open-Source Cyber Threat Intelligence". In Proceedings of the 23rd ACM Conference on Computer and Communications Security (CCS)
21. X. Liao, S. Alrwais, K. Yuan, L. Xing, X. Wang, S. Hao and R. Beyah, 2016 "Lurking Malice in the Cloud: Understanding and Detecting Cloud Repository as a Malicious Service". In Proceedings of the 23rd ACM Conference on Computer and Communications Security (CCS)
22. X. Bai, L. Xing, N. Zhang, X. Wang, X. Liao, T. Li and S. Hu, 2016 "Staying Secure and Unprepared: Understanding and Mitigating the Security Risks of Apple ZeroConf". In Proceedings of the 36th IEEE Symposium on Security and Privacy (IEEE S&P)
23. K. Chen, X. Wang, Y. Chen, P. Wang, Y. Lee, X. Wang, B. Ma, A. Wang, Y. Zhang, W. Zou, 2016 "Following Devil's Footprints: Cross-Platform Analysis of Potentially Harmful Libraries on Android and iOS". In Proceedings of the 36th IEEE Symposium on Security and Privacy (IEEE S&P)
24. X. Liao, K. Yuan, X. Wang, Z. Pei, H. Yang, J. Chen, H. Duan, K. Du, E. Alowaisheq, S. Alrwais, L. Xing and R. Beyah, 2016 "Seeking Nonsense, Looking for Trouble: Efficient Promotional-Infection Detection through Semantic Inconsistency Search". In Proceedings of the 36th IEEE Symposium on Security and Privacy (IEEE S&P)
25. S. Li, N. Bandeira, X. Wang and H. Tang, 2016 "On the Privacy Risks of Sharing Clinical Proteomics Data". In Proceedings of AMIA 2016 Joint Summits on Translational Science
26. V. Bindschaedler, M. Naveed, X. Pan, X. Wang and Y. Huang, 2015 "Practicing Oblivious Access on Cloud Storage: the Gap, the Fallacy and the New Way Forward". In Proceedings of the 22nd ACM Conference on Computer and Communications Security (CCS).
27. Y. Chen, T. Li, X. Wang, K. Chen and X. Han, 2015 "Perplexed Messengers from the Cloud: Automated Security Analysis of Push-Messaging Integrations". In Proceedings of the 22nd ACM Conference on Computer and Communications Security (CCS)
28. Y. Aafer, N. Zhang, Z. Zhang, X. Zhang, K. Chen, X. Wang, X. Zhou, W. Du and M. Grace, 2015 "Hare Hunting in the Wild Android: A Study on the Threat of Hanging Attribute References". In Proceedings of the 22nd ACM Conference on Computer and Communications Security (CCS)
29. X. Wang, Y. Huang, Y. Zhao, H. Tang, X. Wang and D. Bu, 2015 "Efficient Genome-Wide, Privacy-Preserving Similar Patient Query based on Private Edit Distance". In Proceedings of the 22nd ACM Conference on Computer and Communications Security (CCS)

30. L. Xing, X. Bai, T. Li, X. Wang, K. Chen, X. Liao, S. Hu and X. Han, 2015 “Cracking App Isolation on Apple: Unauthorized Cross-App Resource Access on MAC OS X and iOS”. In Proceedings of the 22nd ACM Conference on Computer and Communications Security (CCS)
31. Y. Chen, V. Bindschaedler, X. Wang, S. Berger and D. Pendarakis, 2015, “Elite: Automatic Orchestration of Elastic Detection Services to Secure Cloud Hosting”, In Proceedings of the 18th International Symposium on Research in Attacks, Intrusions and Defenses (RAID).
32. K. Chen, P. Wang, Y. Lee, X. Wang, N. Zhang, H. Huang, W. Zou and P. Liu, 2015 “Finding Unknown Malice in 10 Seconds: Mass Vetting for New Threats at the Google-Play Scale”. In Proceedings of the 24th USENIX Security Symposium (Security).
33. Y. Nan, M. Yang, Z. Yang, S. Zhou, G. Gu and X. Wang, 2015 “UIPicker: User-Input Privacy Identification in Mobile Applications”. In Proceedings of the 24th USENIX Security Symposium (Security)
34. N. Zhang, K. Yuan, M. Naveed, X. Zhou and X. Wang, 2015 “Leave Me Alone, App-level Protection Against Runtime Information Gathering on Android”. In Proceedings of the 36th IEEE Symposium on Security and Privacy (IEEE S&P)
35. S. Demetriou, X. Zhou, M. Naveed, Y. Lee, K. Yuan, X. Wang and C. Gunter, 2015 “What’s in Your Dongle and Bank Account? Mandatory and Discretionary Protection of Android External Resources”. In Proceedings of the 21st Annual Network and Distributed System Security Symposium (NDSS)
36. Y. Zhao, X. Wang, X. Jiang, L. Ohno-Machado and H. Tang, 2015 “Choosing Blindly but Wisely: Differentially Private Solicitation of DNA Datasets for Disease Marker Discovery”. Journal of the American Medical Informatics Association (JAMIA)
37. M. Naveed, S. Agrawal, M. Prabhakaran, X. Wang, E. Ayday, J. Hubaux and C. Gunter, 2014 “Controlled Functional Encryption”. In Proceedings of the 21st ACM Conference on Computer and Communications Security (CCS)
38. T. Li, X. Zhou, L. Xing, Y. Li, M. Naveed, X. Wang and X. Han, 2014 “Mayhem in the Push Clouds: Understanding and Mitigating Security Hazards in Mobile Push-Messaging Services”. In Proceedings of the 21st ACM Conference on Computer and Communications Security (CCS)
39. S. Alrwais, K. Yuan, E. Alowaisheq, Z. Li and X. Wang, 2014 “Understanding the Dark Side of Domain Parking”. In Proceedings of the 23rd USENIX Security Symposium (Security).
40. L. Xing, X. Pan, R. Wang, K. Yuan and X. Wang, 2014 “Upgrading Your Android, Elevating My Malware: Privilege Escalation Through Mobile OS Updating”. In Proceedings of the 35th IEEE Symposium on Security and Privacy (IEEE S&P).
41. X. Zhou, Y. Lee, N. Zhang, M. Naveed and X. Wang, 2014 “The Peril of Fragmentation: Security Hazards in Android Device Driver Customizations”. In Proceedings of the 35th IEEE Symposium on Security and Privacy (IEEE S&P).
42. Z. Li, S. Alrwais, X. Wang and E. Alowaisheq, 2014 “Hunting the Red Fox Online: Understanding and Detection of Mass Redirect-Script Injections”. In Proceedings of the 35th IEEE Symposium on Security and Privacy (IEEE S&P)
43. A. Zhang, X. Xie, K. Chang, C. Gunter, J. Han, X. Wang, 2014 “Privacy Risk in Anonymized Heterogeneous Information Networks”. In Proceedings of the 16th International Conference on Extending Database Technology (EDBT)

44. C. Lin, H. Li, X. Zhou and X. Wang, 2014 “Screenmilk: How to Milk Your Android Screen for Secrets”. In Proceedings of the 20th Annual Network and Distributed System Security Symposium (NDSS).
45. M. Naveed, X. Zhou, S. Demetriou, X. Wang and C. Gunter, 2014 “Inside Job: Understanding and Mitigating the Threat of External Device Misbonding on Android”. In Proceedings of the 20th Annual Network and Distributed System Security Symposium (NDSS).
46. A. Das, J. Bonneau, M. Caesar, N. Borisov and X. Wang, 2014 “The Tangled Web of Password Reuse”. In Proceedings of the 20th Annual Network and Distributed System Security Symposium (NDSS).
47. F. Zhang, W. He, Y. Chen, Z. Li, X. Wang, S. Chen and X. Liu, 2013 “Thwarting Wi-Fi Side-Channel Analysis through Traffic Demultiplexing”. IEEE Transactions on Wireless Communications, Volume 13, Issue 1.
48. X. Zhou, S. Demetriou, D. He, N. Muhammad, X. Pan, X. Wang, C. Gunter and K. Nahrstedt, 2013 “Identity, Location, Disease and More: Inferring Your Secrets from Android Public Resources”. In Proceedings of the 20th ACM Conference on Computer and Communications Security (CCS).
49. R. Wang, L. Xing, X. Wang and S. Chen, 2013 “Unauthorized Origin Crossing on Mobile Platforms: Threats and Mitigation”. In Proceedings of the 20th ACM Conference on Computer and Communications Security (CCS).
50. Z. Li, S. Alrwais, Y. Xie, F. Yu and X. Wang, 2013 “Finding the Linchpins of the Dark Web: a Study on Topologically Dedicated Hosts on Malicious Web Infrastructures”. In Proceedings of the 34th IEEE Symposium on Security and Privacy (IEEE S&P).
51. L. Xing, Y. Chen, X. Wang and S. Chen, 2013 “InteGuard: Toward Automatic Protection of Third-Party Web Service Integrations”. In Proceedings of the 20th Annual Network and Distributed System Security Symposium (NDSS).
52. Z. Li, K. Zhang, Y. Xie, F. Yu and X. Wang, 2012 “Knowing Your Enemy: Understanding and Detecting Malicious Web Advertising”. In Proceedings of the 19th ACM Conference on Computer and Communications Security (CCS).
53. R. Wang, S. Chen and X. Wang, 2012 “Signing Me onto Your Accounts through Facebook and Google: a Traffic-Guided Security Study of Commercially Deployed Single-Sign-On Web Services”. In Proceedings of the 33rd IEEE Symposium on Security and Privacy (IEEE S&P).
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MENTORING

Since 2004, I have graduated 9 PhD students. Also, I am unofficially advising a group of students from different institutions, including UIUC, Georgia Tech, Tsinghua University, Peking University, Chinese Academy of Science and others. Here is the information for those who finished their programs or PostDoc studies

PHD Students Graduated from IU:

Debin Liu (co-advised with Jean Camp): graduated in 2011, first job at PayPal

Rui Wang: graduated in 2013, first job at Microsoft Research

Kehuan Zhang: graduated in 2012, first job at Chinese University at Hong Kong (faculty)

Zhou Li: graduated in 2013, first job at EMC RSA Lab

Xiaoyong Zhou: graduated in 2014, first job at Samsung Research America

Yangyi Chen: graduated in 2015, first job at Google

Yongan Zhao (co-advised with Haixu Tang): graduated at 2016, first job at Seven Bridge Genomics

Luyi Xing: graduated in 2017, first job at Amazon

Sumayah Alrwais: graduated in 2017, first job at King Saud University (faculty)

Unofficially Advised PHD Students Graduated or Graduating from Other Schools:

Muhammad Naveed (UIUC, advised by Carl Gunter): graduated in 2016, first job at University of Southern California (faculty)

Xiaojing Liao (Georgia Tech, advised by Raheem Beyah): graduated in 2017, first job at William and Mary College (faculty)

Xiaolong Bai (Tsinghua University): graduated in 2017, first job at Alibaba

PAST POSTDOC Fellows:

Kai Chen: from 2014 to 2015, now Full Professor at Chinese Academy of Science

Zhuowei Li: from 2005 to 2008, now Principal Software Engineering Manager at Microsoft